FY 2001 MILITARY CONSTRUCTION, DEFNESE-WIDE (\$ in Thousands)

State/Agency/Installation/Project	Authorization <u>Request</u>	Approp. Request	New/ Current <u>Mission</u>	Page <u>No.</u>
Maryland				
Fort Meade				
Critical Utility Control (Phase II)	769	769	C	135
Route 32	3,459	3,459	С	138
Total	4,228	4,228		

1. Component NSA/CSS	FY 2001 MILITARY CONSTRUCTION PROJECT DATA				2. DATE
Defense					February 2000
3. INSTALLATION AND LOCATION 4. PROJECT TITLE					
Fort George G. Meade, Maryland Critical Utility Control Phase II					Phase II
5 PROGRAM ELEM	MENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT	COST (\$000)
030101	1G	821	4004		769

9. COST ESTIMATES

9. COST ESTIMATES						
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)		
Primary Facility				420		
Software, Integration & Hardware	LS			(420)		
Supporting Facilities				349		
Installation	LS			(264)		
System Start-up and Training	LS			(85)		
Subtotal				769		
Total Contract Cost				769		
Total Request				769		

10. DESCRIPTION OF PROPOSED CONSTRUCTION

The Critical Utility Control Phase II project will extend the monitoring and control capabilities of the supervisory control and data acquisition system (SCADA) provided by the Critical Substation Control (CSC) and Critical Utilities Control Phase 1 (CUC1) projects to additional power systems which support critical mission functions within the Headquarters complex. The project will include the capability to monitor and control low voltage substations that directly support key Agency operational areas in the HQ, Tordella, OPS1, 2A and 2B buildings. A load shedding scheme shall be provided to allow site-generated power to be distributed to the most critical locations should off site power be lost. The system will include redundant hardware and communications links in order to maximize system availability. Integration with existing SCADA and energy monitoring and control system (EMCS) will also be included.

Critical Utility Control Phase II will be constructed within existing building spaces. The system will be comprised of hardware, software, integrated systems, graphic computer screens, locally installed interface devices, power meters, communication hubs, fiber optic cable, factory acceptance testing, hardware and software documentation, training, and miscellaneous supporting system components.

1. Component NSA/CSS	FY 2001 MILITARY CONSTRUCTION PROJECT DATA	A	2. Date
Defense			February 2000
3. INSTALLATIO	ON AND LOCATION		
	Fort George G. Meade, MD		
4. PROJECT TITLE	5.	PROJE	CT NUMBER
	Critical Utility Control, Phase II		4004

Proprietary items may be used where necessary to maintain compatibility of existing systems and to reduce maintenance and future repair expense.

11. Requirements: N/A

Project: This project will provide the capability to monitor and control low voltage substations that directly support several key Agency operational areas.

Requirements: This project is required to increase the reliability and availability of utility systems supporting critical mission functions in key operational areas within the Headquarters complex.

Current Situation: The aging nature of our facilities, combined with the increase in complexity of our utility systems, has produced increased system outages. It is highly probable that without remote monitoring and controlling capability, that mission related systems will experience an ever increasing number of outages - both in duration and frequency. As the utility systems are currently configured, they are not capable of providing reliable support to mission systems. When a problem occurs, personnel must make a field analysis of the situation and physically throw switches, breakers, etc. Little remote analysis can be done and no remote operational capability exists.

Impact If Not Provided: It is highly probable that without Critical Utility Control Phase II, critical mission utilities shall continue to experience a decease in utility systems reliability and availability which support key mission operations. The SCADA load shed scheme will not be fully implemented and capability to distribute site-generated power will be compromised. The Facilities Control Center will not have real time access to data concerning the status of electric utilities supporting critical mission elements.

Related Projects/Systems: This project is the third in a series of projects. The first two projects are FY 1995 Critical Substation Control and FY 1996 Critical Utility Control, Phase I.

Point of Contact: Leonadr D. Zellers, (301) 688-6550

1. Component	FY 2001 MILITARY	CONSTRUCTION	J PRAIFCT D	ЛТЛ	2. Date
NSA/CSS	F1 20 <u>01 WILLIAMI</u>	CONSTRUCTION	(TROJECT D	AIA	February 2000
Defense					Teordary 2000
3. INSTALLATIO	ON AND LOCATION				
	Fort (George G. Meade, N	MD		
4. PROJECT TITLE		scorge G. Meade, N		5. PROJ	ECT NUMBER
	Critical Utilities Cont	rol, Phase II			4004
SUPPLEMENT	DATA				
A. DESIGN D	ATA (Estimated)				
1. STATUS					
a. Da	te Design Started		Aug 98		
b. Pe	rcent Completed as of January 1,	1999	35%		
c. Pe	rcent Completed as of October 1,	1999	65%		
d. Da	te Design Completed		Apr 00		
2. BASIS					
a. S	tandard or Definite Design	Yes	NoX		
b. V	Where Design Was Most Recentl	y Used	N/A		
3. COST (\$000) = c = a + b = d + e		70		
	Production of Plans and Specifica	tions	50		
	All Other Design Costs		20		
	Total Contract		70		
	n-house				
C. 1	n-nouse				
4. CONSTRUC	TION START		Feb 2001		
B. EQUIPME APPROPR	NT ASSOCIATED WITH THIS PI IATIONS:	ROJECT WHICH WILL E	BE PROVIDED FRO	OM OTHE	R
	.	Fiscal Year	~		
Equipment Nomenclature	Procuring <u>Appropriation</u>	Appropriated or Requested	Cost (\$000)		
	<u>rippropriation</u>	or requesteu	ζφοσο		
N/A					

Point of Contact: Leonard D. Zellers, (301) 688-6550

1. Component NSA/CSS	FY 20 <u>01 MILITARY CONSTRUCTION PROJECT DATA</u>				2. DATE
Defense					February2000
3. INSTALLATION AND LOCATION 4. PROJECT TITLE					
Fort George G. Meade, Maryland Route 32					
5 PROGRAM ELEN	MENT	6. CATEGORY CODE	7. PROJECT NUMBER 8. PROJECT COST (\$000)		
0301011	lG	851	8669		3,459
9. COST ESTIMATES					

ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
Primary Work:	LS			1,572
Access Road				(400)
Upgrade Canine/Samford				(1,172)
Supporting Infrastructure:	LS			1,700
Utility Ductbank				(1,000)
Pedestrian Bridge				(300)
Stormwater Management				(400)
Subtotal				3,272
SIOH (5.7%)				187
Total Contract Cost				3,459
Total Request				3,459

10. DESCRIPTION OF PROPOSED CONSTRUCTION

This project is directly related to the Maryland State Highway Administration (MSHA) Route 32 Project and National Security Agency (NSA) Perimeter Security Anti-Terrorism (PSAT) Program. The project will upgrade Canine Road from the Canine/Samford interchange to Emory Road. This upgrade is necessary to support new traffic flows that will be created within the NSA campus. A new pedestrian bridge spanning over Canine Road will be constructed to provide safe access to VCC # 1 from the N-10 Parking Lot due to increased vehicular traffic expected. Additional support construction items include Agency contributions to MSHA for stormwater management structure(s), construction of a new road for vehicular access to the National Cryptologic Museum and National Vigilance Park public attractions, and a new utility ductbank to reroute communications utilities out of the planned roadwork construction path.

All necessary revisions to the existing roadway systems and utilities to accommodate the work will be included.

Proprietary items will be used where necessary to maintain compatibility of roadway systems and to reduce maintenance and future repair expense.

Date FY 2001 MILITARY CONSTRUCTION PROJECT DATA NSA/CSS Defense February 2000

3. INSTALLATION AND LOCATION

Fort George G. Meade, MD

4. PROJECT TITLE PROJECT NUMBER Route 32 8669

11. Requirements: N/A

Project: This project will provide necessary capability to make the SHA Route 32 and Agency PSAT Programs complete and operational to fulfil Agency operations.

Requirements: This project is required to support key infrastructure functions within the Headquarters complex.

<u>Current Situation</u>: Route 32 is currently exposing vehicular traffic to unsafe at-grade intersections. The MD Route 32 project has been carefully planned by MSHA in conjunction with Agency needs. The Agency is partnering with MSHA and Corps of Engineers to ensure complete project success.

Impact if not provided: The Route 32 Upgrade Project being executed by the MSHA will not meet the Agency's safety and security needs.

Related Projects/Systems: This project is directly related to the Maryland State Highway Administration Route 32 Project and NSA's Perimeter Security Anti-Terrorism Program.

Point of Contact: Leonard D. Zellers, (301) 688-6550

1. Component	FY 20 <u>01 MILITARY</u>	CONSTRUCTION	PROJECT DATA	2. Date
NSA/CSS	0 <u>0</u>		110020121111	February 2000
Defense				
3. INSTALLATIO	ON AND LOCATION			
	Fort (George G. Meade, N	ID	
4. PROJECT TITLE	L		5. PRO	JECT NUMBER
	Route 32			8669
SUPPLEMENT				0007
A DESIGN D	ATA (Estimated)			
	(1171 (Estimated)			
1. STATUS	4- D: C44- 1		D 00	
	te Design Started	2000	Dec 99 0%	
	rcent Completed as of January 1, rcent Completed as of October 1,		100%	
	te Design Completed	2000	Jul 00	
u. Da	te Design Completed		<u>Jul 00</u>	
2. BASIS				
	andard or Definite Design		NoX	
b. \	Where Design Was Most Recent	y Used	N/A	
3. COST (\$000)	0 = c = a + b = d + e		350	
a. P	roduction of Plans and Specifica	tions	222	
b. <i>A</i>	All Other Design Costs		128	
с. Т	`otal		350	
d. C	Contract		350	
e. I	n-house		0	
4. CONSTRUC	ΓΙΟΝ START		Nov 2000	
				ZD.
B. EQUIPME APPROPRI	NT ASSOCIATED WITH THIS PI IATIONS:	OJECT WHICH WILL B	E PKOVIDED FROM OTHI	EK
		Fiscal Year		
Equipment	Procuring	Appropriated	Cost	
<u>Nomenclature</u>	<u>Appropriation</u>	or Requested	<u>(\$000)</u>	

N/A

Point of Contact: Leonard D. Zellers (301) 688-6550